

ISOLATION STRUCTURE FOR TRENCH CAPACITORS AND FABRICATION METHOD THEREOF

Abstract

An isolation structure of a trench capacitor of DRAM has a first isolation portion covering the trench capacitor and filling a top opening of the deep trench and a second isolation portion directly contacting the first isolation portion and surrounding the deep trench without overlapping the deep trench. The thickness of the second isolation portion is larger than the thickness of the first isolation portion.